

Neurexophilin-3 (m): 293T Lysate: sc-125696

BACKGROUND

Neurexophilin-1 (also known as NPH1 or NXPH1), Neurexophilin-2 (also known as NPH2 or NXPH2) and Neurexophilin-3 (also known as NPH3 or NXPH3) are members of the Neurexophilin family (Neurexophilin-1–4) of neuropeptide-like glycoproteins that are proteolytically processed after synthesis. Neurexophilin-1–3 are secreted proteins that are thought to function as signaling molecules which specifically bind to target proteins, such as neuexin α (a protein that promotes adhesion between dendrites and axons), and are essential for proper neurotransmitter release. While Neurexophilin-1 is located primarily in spleen tissue, Neurexophilin-2 is expressed primarily in kidney and both Neurexophilin-2 and Neurexophilin-3 are highly expressed in brain. Defects in the gene encoding Neurexophilin-1 may be associated with schizophrenia, a mental disorder characterized by an abnormal perception of reality.

REFERENCES

- Petrenko, A.G., Ullrich, B., Missler, M., Krasnoperov, V., Rosahl, T.W. and Südhof, T.C. 1996. Structure and evolution of neurexophilin. *J. Neurosci.* 16: 4360-4369.
- Missler, M., Hammer, R.E. and Südhof, T.C. 1998. Neurexophilin binding to α -neuexins. A single LNS domain functions as an independently folding ligand-binding unit. *J. Biol. Chem.* 273: 34716-34723.
- Missler, M. and Südhof, T.C. 1998. Neurexophilins form a conserved family of neuropeptide-like glycoproteins. *J. Neurosci.* 18: 3630-3638.
- Clariss, H.J., McKeown, S. and Key, B. 2002. Expression of neuexin ligands, the neuroligins and the neurexophilins, in the developing and adult rodent olfactory bulb. *Int. J. Dev. Biol.* 46: 649-652.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 604639. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Nussbaum, J., Xu, Q., Payne, T.J., Ma, J.Z., Huang, W., Gelernter, J. and Li, M.D. 2008. Significant association of the neuexin-1 gene (NRXN1) with nicotine dependence in European- and African-American smokers. *Hum. Mol. Genet.* 17: 1569-1577.
- Kang, Y., Zhang, X., Dobie, F., Wu, H. and Craig, A.M. 2008. Induction of GABAergic postsynaptic differentiation by α -neuexins. *J. Biol. Chem.* 283: 2323-2334.

CHROMOSOMAL LOCATION

Genetic locus: Nxph3 (mouse) mapping to 11 D.

PRODUCT

Neurexophilin-3 (m): 293T Lysate represents a lysate of mouse Neurexophilin-3 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

Neurexophilin-3 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Neurexophilin-3 antibodies. Recommended use: 10-20 μ l per lane.

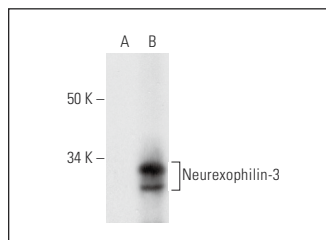
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Neurexophilin-3 (B-11): sc-393156 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Neurexophilin-3 expression in Neurexophilin-3 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Neurexophilin-3 (B-11): sc-393156. Western blot analysis of Neurexophilin-3 expression in non-transfected: sc-117752 (A) and mouse Neurexophilin-3 transfected: sc-125696 (B) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.